

Title (en)

Co-cured rubber-thermoplastic elastomer compositions

Title (de)

Co-gehärtete Zusammensetzungen aus Kautschuk und thermoplastischem Elastomer

Title (fr)

Compositions co-vulcanisées à partir de caoutchouc et un élastomère thermoplastique

Publication

EP 0962494 A1 19991208 (EN)

Application

EP 98110388 A 19980606

Priority

- EP 98110388 A 19980606
- US 68679896 A 19960726

Abstract (en)

A thermoplastic elastomer composition has a plastic phase or matrix of an engineering thermoplastic such as a polyamide and a crosslinked phase of cured acrylic rubbers. The rubbers contain at least two functionalized acrylic rubbers wherein the functional group such as a carboxyl, an epoxy, or a hydroxyl can be the same or different. The curing agents generally react via covalent bonding with the reactive functional groups of the rubbers. The composition can be dynamically vulcanized and when one of the rubbers is a terpolymer of ethylene-alkyl acrylate-unsaturated carboxylic acid, the composition has a single low temperature brittle point.

IPC 1-7

C08L 33/04; **C08L 23/08**; **C08L 77/00**

IPC 8 full level

C08F 8/30 (2006.01); **C08L 23/08** (2006.01); **C08L 33/06** (2006.01); **C08L 67/02** (2006.01); **C08L 77/00** (2006.01)

CPC (source: EP US)

C08F 8/30 (2013.01 - EP US); **C08L 23/08** (2013.01 - EP US); **C08L 33/064** (2013.01 - EP US); **C08L 67/02** (2013.01 - EP US); **C08L 77/00** (2013.01 - EP US); **C08L 23/0869** (2013.01 - EP US); **C08L 33/06** (2013.01 - EP US); **C08L 2205/08** (2013.01 - EP US); **C08L 2205/22** (2013.01 - EP US)

Citation (search report)

- [X] WO 9601291 A1 19960118 - ADVANCED ELASTOMER SYSTEMS [US], et al
- [E] EP 0849334 A1 19980624 - ADVANCED ELASTOMER SYSTEMS [US]
- [Y] EP 0811658 A2 19971210 - ADVANCED ELASTOMER SYSTEMS [US]
- [Y] US 5180777 A 19930119 - PADWA ALLEN R [US], et al
- [DA] EP 0337977 A2 19891018 - MONSANTO CO [US]
- [A] US 5591798 A 19970107 - PATEL RAMAN [US]

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 5777033 A 19980707; EP 0962494 A1 19991208

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